

**AMENDMENTS TO THE CLAIMS:**

1. (Currently amended) A method for ~~detecting facilitating the detection of~~ species-specific nucleic acid, comprising:
  - a) providing
    - i) a nucleic acid sample selected from the group consisting of a first cell nucleic acid sample from a culture of cells of a first species and a cell product derived from said first cell sample, wherein said sample culture has had previous exposure to a second culture of cells from a second species or a cell product derived from said second cells;
    - ii) first nucleic acid probes specific for nucleic acid derived from said second species;
    - (iii) second nucleic acid probes specific for said first species;
  - b) exposing said sample to said first nucleic acid probes under conditions such that said first nucleic acid probes hybridize to said nucleic acid ~~derived from~~ from said second species and do not hybridize to nucleic acid from said first cell sample to detect nucleic acid, thereby facilitating the detection of said nucleic acid derived from said second species; and
  - c) exposing said sample to second nucleic acid probes, wherein said second nucleic acid probes are selected from the group consisting of SEQ ID NO:3 and SEQ ID NO:4, under conditions such that said second nucleic acid probes hybridize to said nucleic acid from said first species and do not hybridize to nucleic acid from said second species to detect nucleic acid from said first species.
2. (Currently amended) The method of claim 1, wherein said first nucleic acid probes are specific for a repetitive element of nucleic acid ~~derived from~~ in the genome of said second species.
3. (Currently amended) The method of claim 2, wherein said repetitive element is present in the genome of said second species in at least 20 copies.
4. (Cancelled)

5. (Currently amended) The method of claim 1, wherein said second culture of cells sample is selected from the group consisting of a rat cells sample, a mouse cells sample, and a porcine cells sample.
6. (Original) The method of claim 1, wherein said exposing comprises PCR.
7. (Original) The method of claim 6, wherein said nucleic acid probes are PCR primers.
8. (Cancelled)
9. (Currently amended) The method of claim 1 8, wherein said first nucleic acid probes and said second nucleic acid probes are PCR primers, and wherein said exposing comprises PCR, and wherein said PCR is a multiplex PCR reaction.
10. (Currently amended) The method of claim 1 8, wherein said first nucleic acid probes are selected from the group consisting of SEQ ID NOs: 1, 2, and 5-26
11. (Cancelled)
12. (Currently amended) The method of claim 1, wherein said culture of cells from a first species sample is a cultured human skin tissue.
13. (Currently amended) The method of claim 12 4, wherein said cultured human skin tissue comprises keratinocytes selected from the group consisting of primary keratinocytes and immortalized keratinocytes.
14. (Original) The method of Claim 13, wherein said immortalized keratinocytes are NIKS cells.

15. (Currently amended) The method of claim 1, wherein said first cell culture of cells from a first species sample comprises stem cells.

16. (Currently amended) The method of claim 1, wherein said second culture of cells sample comprises feeder cells.

17. (Original) The method of claim 16, wherein said feeder cells are mouse fibroblast cells.

18-26. (Cancelled)

27. (Currently amended) A method for ~~detecting facilitating the detection of~~ species-specific nucleic acid, comprising:

- a) providing
  - i) a nucleic acid sample selected from the group consisting of a first cell sample from a culture of cells from a first species and a cell product derived from said first cell sample, wherein said sample culture has had previous exposure to a feeder layer ~~derived~~ from a second species;
  - ii) first nucleic acid probes specific for nucleic acid derived from said feeder layer from said second species, wherein said first nucleic acid probes are selected from the group consisting of SEQ ID NOs: 1, 2, and 5-26;
  - iii) second nucleic acid probes specific for said first species selected from the group consisting of SEQ ID NO:3 and SEQ ID NO:4
- b) exposing said sample to said first nucleic acid probes under conditions such that said first nucleic acid probes hybridize to said nucleic acid derived from said feeder layer and do not hybridize to nucleic acid derived from said sample, ~~thereby facilitating the specific detection of said to detect~~ nucleic acid derived from said second species; and
- c) exposing said sample to said second nucleic acid probes under conditions such that said second nucleic acid probes hybridize to said nucleic acid derived from said first species and do not hybridize to nucleic acid from said second species to detect nucleic acid from said first species.

28. (Currently amended) The method of claim 27, wherein said nucleic acid probes are specific for a repetitive element of nucleic acid ~~derived from~~ in the genome of said second species.

29. (Currently amended) The method of claim 28, wherein said repetitive element is present in the genome of said second species in at least 20 copies.

30. (Currently amended) The method of claim 27, wherein said second culture of cells sample is selected from the group consisting of a rat cells sample, a mouse cells sample, and a porcine cells sample.

31. (Original) The method of claim 27, wherein said feeder layer is a mouse cell feeder layer.

32. (Original) The method of claim 27, wherein said exposing comprises PCR.

33. (Original) The method of claim 32, wherein said nucleic acid probes are PCR primers.

34. (Cancelled)

35. (Currently amended) The method of claim 27 34, wherein said nucleic acid probes and said second nucleic acid probes are PCR primers, and wherein said exposing comprises PCR, and wherein said PCR is a multiplex PCR reaction.

36. (Cancelled)

37. (Currently amended) The method of claim 27, wherein said culture of cells from a first species sample is a cultured human skin tissue.

38. (Original) The method of claim 37, wherein said cultured human skin tissue comprises NIKS cells.